

Notice of Allowability

Application No.

10/646,456

Examiner

Richard Pantoliano Jr

Applicant(s)

CLARK ET AL.

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 14 March 2007 and interview conducted 29 August 2007.
2. ☒ The allowed claim(s) is/are 1-9, 13-30 and 32-35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20070831.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Ms. Naya Chatterjee-Marathe (Reg. No. 54,680) on 30 August 2007.

3. The application has been amended as follows:

a) Claim 1: Replace with the following:

"A method for use by a first process executing in a computer system for interacting with a second process executing in the computer system, the method comprising:

 during a startup sequence of the second process, creating a copy of a global notification hook of the first process in the second process;

 using the copy of the global notification hook, detecting an occurrence of a triggering message passed between an operating system and a thread of the second process;

 in response to detecting the occurrence of the triggering message, determining whether subsequent messages passed between the operating system and the thread of the second process should be monitored;

in the event that the subsequent messages should be monitored, activating a thread-level message hook within the thread of the second process, wherein the thread-level message hook is configured to monitor the subsequent messages;

during a startup sequence of the first process:

detecting a third process executing in the computer system;

inserting a copy of the global notification hook into the third process; and

broadcasting a private startup message to the copy of the global notification hook in the third process;

wherein, in response to the private startup message, the copy of the global notification hook executes acts of:

determining whether subsequent messages passed between the operating system and a thread of the third process should be monitored; and

in the event that the subsequent messages should be monitored, activating a thread-level message hook within the thread of the third process;

wherein determining whether subsequent messages passed between the operating system and the thread of the third process should be monitored includes:

identifying a previously created window of the third process; and

determining whether the previously created window is of interest, wherein subsequent messages should be monitored in the event that the previously created window is of interest.”

b) Cancel Claims 10-12;

c) Claim 18: Replace with the following:

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"A method for use by a first process executing in a computer system for interacting with a second process executing in the computer system, the method comprising:

- during a startup sequence of the first process, creating a copy of a global notification hook of the first process in the second process;

- broadcasting a private startup message from the first process to the copy of the global notification hook;

- wherein, in response to the private startup message, the copy of the global notification hook executes acts of:

- determining whether subsequent messages passed between the operating system and a thread of the second process should be monitored; and

- in the event that subsequent messages should be monitored, activating a thread-level message hook within the thread of the second process, wherein the thread-level message hook is configured to monitor the subsequent messages;

- during a startup sequence of the first process:

- detecting a third process executing in the computer system;

- inserting a copy of the global notification hook into the third process; and

- broadcasting a private startup message to the copy of the global notification hook in the third process;

- wherein, in response to the private startup message, the copy of the global notification hook executes acts of:

- determining whether subsequent messages passed between the operating system and a thread of the third process should be monitored; and

in the event that the subsequent messages should be monitored,
activating a thread-level message hook within the thread of the third process;
wherein determining whether subsequent messages passed between the
operating system and the thread of the third process should be monitored includes:
identifying a previously created window of the third process; and
determining whether the previously created window is of interest, wherein
subsequent messages should be monitored in the event that the previously created
window is of interest.”

d) Claim 19, line 2: Replace “third” with --forth-- ;

e) Claim 27: Replace with the following:

“A computer program product stored on a computer-readable medium for use by a first
process executing in a computer system for interacting with a second process executing
in the computer system, the computer program product comprising:

program code for creating a copy of a global notification hook of the first process
in the second process during a startup sequence of the second process;

program code for detecting an occurrence of a triggering message in the second
process;

program code for determining, in response to detecting the occurrence of the
triggering message, whether subsequent messages passed between the operating
system and a thread of the second process should be monitored;

program code for activating a thread-level message hook within the thread of the
second process in the event that the subsequent messages should be monitored,

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wherein the thread-level message hook is configured to monitor the subsequent messages;

program code for, during a startup sequence of the first process:

detecting a third process executing in the computer system;

inserting a copy of the global notification hook into the third process; and

broadcasting a private startup message to the copy of the global

notification hook in the third process;

wherein, in response to the private startup message, the copy of the global notification hook executes program code for:

determining whether subsequent messages passed between the operating system and a thread of the third process should be monitored; and

in the event that the subsequent messages should be monitored, activating a thread-level message hook within the thread of the third process;

wherein determining whether subsequent messages passed between the operating system and the thread of the third process should be monitored includes:

identifying a previously created window of the third process; and

determining whether the previously created window is of interest, wherein subsequent messages should be monitored in the event that the previously created window is of interest.”

f) Claim 32: Replace with the following:

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"A computer program product stored on a computer-readable medium for use by a first process executing in a computer system for interacting with a second process executing in the computer system; the computer program product comprising:

- program code for creating a copy of a global notification hook of the first process in the second process during a startup sequence of the second process;

- program code for broadcasting a private startup message from the first process to the copy of the global notification hook;

- program code for determining, in response to the private startup message, whether subsequent messages passed between the operating system and a thread of the second process should be monitored;

- program code for activating a thread-level message hook within the thread of the second process, in the even that the subsequent messages should be monitored, wherein the thread-level message hook is configured to monitor the subsequent messages;

- program code for, during a startup sequence of the first process:

 - detecting a third process executing in the computer system;

 - inserting a copy of the global notification hook into the third process; and

 - broadcasting a private startup message to the copy of the global notification hook in the third process;

 - wherein, in response to the private startup message, the copy of the global notification hook executes program code for:

determining whether subsequent messages passed between the operating system and a thread of the third process should be monitored; and
in the event that the subsequent messages should be monitored, activating a thread-level message hook within the thread of the third process;
wherein determining whether subsequent messages passed between the operating system and the thread of the third process should be monitored includes:
identifying a previously created window of the third process; and
determining whether the previously created window is of interest, wherein subsequent messages should be monitored in the event that the previously created window is of interest."

4. The following is an examiner's statement of reasons for allowance:

a) The art of record used as the basis for the previous rejection, De Armas et al (US Pat: 6,611,878) and Teilhet (Teilhet, Stephen. Subclassing and Hooking with Visual Basic. O'Reilly Publishing, June 2001), do not expressly teach or render obvious the invention as recited in independent **Claims 1, 18, 27, and 32**.

b) As to **Claim 1**, the art of record does not expressly teach wherein determining whether subsequent messages passed between the operating system and the thread of the third process should be monitored includes identifying a previously created window of the third process and determining whether the previously created window is of interest, wherein subsequent messages should be monitored in the event that the previously created window is of interest, when taken in the context of the claim, as a

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whole. Also, there is no basis in evidence for asserting a motivation that one of ordinary skill in the art at the time of invention was made would have modified the method as described to combine the limitations as recited in the context of **Claim 1**.

c) As to **Claims 18, 27 and 32**, these claims are allowable for the same reasoning as applied to **Claim 1**.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Pantoliano Jr whose telephone number is (571) 270-1049. The examiner can normally be reached on Monday-Thursday, 8am - 4 pm EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RP
08/31/2007


WILLIAM THOMSON
SENIOR PATENT EXAMINER